

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1- 18. (Canceled)

19. (Original) A current detector for detecting or measuring an electric current, comprising:

(a) two Hall-effect devices each for generating a voltage proportional to magnetic field strength:

(b) two current path terminals for the inflow and outflow, respectively, of a current to be detected or measured; and

(c) a metal-made baseplate mechanically supporting the Hall-effect devices, the baseplate being slitted to define a current path having a pair of opposite extremities connected respectively to the current path terminals, the current path being contiguous to the Hall-effect devices for causing the same to generate voltages proportional to the magnitude of a current flowing through the current path;

(d) whereby the magnitude of the current flowing through the current path is detectable in terms of the sum of the absolute values of the output voltages of the Hall-effect devices.

20. (Original) The current detector of claim 19 wherein the current path in the baseplate is in the shape of an S.

21. (Original) The current detector of claim 20 wherein the baseplate is a generally rectangular piece of sheet metal having a first edge, a second edge opposite to the first edge, a third edge at right angles with the first and the second edge, and a fourth edge opposite to the third edge, wherein the baseplate has a first slit cut into the baseplate from the first edge thereof to bound part of one side edge of the S-shaped current path, and a second slit cut into the baseplate from the second edge thereof to bound part of another side edge of the current path, wherein the current path comprises a first part between the third baseplate edge and the second slit, a second part between the first baseplate edge and the second slit, a third part between the first and the second slit, a fourth part between the second baseplate edge and the first slit, and a fifth part between the fourth baseplate edge and the first slit, and wherein the two current path terminals are joined respectively to the first and the second edge of the baseplate in positions continuous to the first and the fifth part of the current path.

22. (Original) The current detector of claim 21 wherein each Hall-effect device has a primary working part for the development of the voltage proportional to the magnitude of the current flowing through the current path in the baseplate, the primary working parts of the two Hall-effect devices being substantially thoroughly contained respectively between the first and the third part, and between the third and the fifth part, of the current path, both as seen in a direction normal to the baseplate.

23. (Original) The current detector of claim 19 further comprising an output circuit for combining the absolute values of the output voltages of the Hall-effect devices.

24. (Original) The current detector of claim 23 wherein the output circuit comprises:

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- (a) two amplifiers connected respectively to the Hall-effect devices; and
- (b) arithmetic means connected to the amplifiers for providing an output representative of the sum of the absolute values of outputs from the amplifiers.